Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
Indian Point Energy Center
450 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Entergy

Paul W. Rubin
General Manager, Plant Operations
Tel 914 734 5334

February 13, 2006

Re: Indian Point Unit Nos. 1 and 2
Docket Nos. 50-003 and 50-247
NL-05-129 Revision 1

Regional Administrator, Region 1
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406-1415

Subject: **Revised Monitoring Well MW-111 Tritium 30 Day Special Report**

Reference:
1) Entergy letter NL-05-129, "Monitoring Well MW-111 Tritium 30 Day Special Report", dated November 3, 2005
2) Offsite Dose Calculation Manual, Revision 9, Section D 3.5; "Radiological Environmental Monitoring"

Dear Mr. Collins:

This report is revision 1 to Entergy letter NL-05-129 (reference 1) to clarify that monitoring well MW-111 was not part of the station's Radiological Environmental Monitoring Program (REMP), to correct the number of wells initially sampled, and to include sample results from additional wells that were installed as part of the ongoing tritium investigation.

While this report is not required to be submitted per Section D 3.5 of the Indian Point 2 Offsite Dose Calculation Manual (ODCM) (reference 2) since the MW-111 sample is not currently part of the REMP, this report is being made in accordance with the spirit of the REMP to formally provide this information. On October 5, 2005, the measured tritium activity from groundwater monitoring well MW-111 was found to be 2.11 E+5 pCi/L (2.11E-4 uCi/ml), which is above the ODCM reporting limit of 3.0 E+4 pCi/L (3.0E-5 uCi/ml). MW-111 was initially installed in the year 2000 to evaluate the possibility of contaminants such as oil and PCB's in preparation for the sale of Indian Point Unit 2 to Entergy. MW-111 is located in the Protected Area, in the Unit 2 transformer yard, an area that is relatively close to both the Unit 1 and Unit 2 Spent Fuel Pools.

The groundwater from this well was analyzed for tritium content when it was installed in the year 2000 and no tritium was detected. Since that time no other samples have been taken. As part of the initial investigation into the Indian Point 2 fuel pool south wall leak, samples were taken from four existing on-site wells and analyzed for radiological content. Only monitoring well MW-111 indicated the presence of tritium.

During the continuing efforts to investigate the Unit 2 spent fuel pool south wall leak, samples from five additional existing shallow wells located in the vicinity of the Indian Point 3 Turbine Building were taken in mid-October. When analyzed, the only radionuclide identified was tritium (H3) in the following concentrations:

T-1 (inside Turbine Building, NE corner) 1.6 E-6 uCi/ml (1600 pCi/L);
T-2 (inside Turbine Building, SW corner) 7.7 E-7 uCi/ml (770 pCi/L;
U-3-1 (outside Turbine Building, NW corner) 4 E-7 uCi/ml (400 pCi/L);
U-3-2 (outside Turbine Building, NW corner) 9.6 E-7 uCi/ml (960 pCi/L);
U-3-3 (outside Turbine Building, NW corner) 4.4 E-7 uCi/ml (440 pCi/L).

For perspective, the Federal Environmental Protection Agency (EPA) regulation, 40 CFR 141 limits tritium concentration in drinking water to 20,000 pCi/L (or 2 E-5 uCi/ml). The highest of these five samples (T-1) contained a tritium concentration that was less than 10% of the tritium concentration permitted by EPA standards for drinking water. It is noted that there are no drinking water sources in the vicinity of any of these wells.

Additionally, several monitoring wells have been drilled since the discovery of tritium in monitoring well MW-111. These monitoring wells have been sampled with resulting tritium concentrations as follows:

MW-30 (inside Fuel Storage Building, SW corner next to the spent fuel pool concrete wall) 464,000 pCi/L to 600,000 pCi/L;
MW-33 (in Transformer Yard, NE corner next to Primary Auxiliary Building wall) 142,000 pCi/L to 242,000 pCi/L;
MW-34 (in Transformer Yard, between MW-33 and MW-35, next to Primary Auxiliary Building wall) 63,900 pCi/L to 212,000 pCi/L;
MW-35 (in Transformer Yard, SE corner, next to Primary Auxiliary Building wall) 42,300 pCi/L to 104,000 pCi/L.

Entergy is currently working with a hydrologist and other consultants to design and implement a groundwater monitoring study to determine the source(s) of the tritium. This information will be used to determine any necessary corrective actions. The NRC is inspecting this effort. The cause of exceeding the limits and corrective action will be provided in the annual REMP report when available.

There are no new commitments made by Entergy contained in this letter. If you have any questions, please contact Patric W. Conroy, Manager, Licensing at (914) 734-6668.

Very truly yours,

Paul W. Rubin
General Manager, Plant Operations
Indian Point Energy Center

cc: next page

cc: Mr. John P. Boska, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
U.S. Nuclear Regulatory Commission

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Mr. Paul Eddy
New York State Dept. of Public Service